

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUNE 21, 1991

John Randall
Hi-Tech Industries, Inc.
17029 Devonshire St. #124
Northridge, CA 91325-1679

Dear Mr. Randall:

This is in response to your letter to me and subsequent telephone conversations with Dave Topping of my staff. During this correspondence, you have posed several specific questions. While some of them have been already answered during these telephone conversations, our responses are repeated below. Also, we would like to thank you for the information that you have provided to us regarding spent antifreeze.

1) How many parts per million (ppm) of lead does the EPA consider high enough to classify the waste spent antifreeze as EP Toxic?

A lead concentration of 5.0 ppm or greater in the leaching test extract defines a waste as hazardous. Please note that, in March of 1990, EPA promulgated the Toxicity Characteristic rule which, among other things, replaced the Extraction Procedure test of the EP Toxicity characteristic with the Toxicity Characteristic Leaching Procedure (TCLP). For wastes that are liquids, however, the two tests are the same--namely, a direct analysis of the liquid.

2) Does EP Toxic mean the same as hazardous waste?

"EP Toxic" wastes are a subset of "hazardous wastes." In addition to the Toxicity Characteristic (which replaced the EP Toxicity characteristic, as explained above), there are other hazardous waste characteristics, as well as specific lists of hazardous wastes. If a waste exhibits one of these characteristics (ignitability, corrosivity, reactivity, or toxicity), or is specifically listed, it is defined as a hazardous waste.

3) Which other elements constitute EP Toxic substances in spent antifreeze (i.e., copper, zinc)?

The toxic constituents on the Toxicity Characteristic list, and their regulatory levels (which, if equaled or exceeded in the TCLP extract, define the waste as hazardous), are listed in Table I of the enclosure.

4) When you said spent antifreeze often contains high lead levels, what percentage of the time did you mean by the word “often?”

We do not have a sufficiently complete database to project the percentage of samples that would be expected to contain high lead levels. Also, the data that we do have provides no apparent “pattern” to indicate which used antifreeze sources would typically contain high lead levels.

5) How would an individual ascertain the lead level in his spent antifreeze to determine if they would be required to comply with hazardous waste disposal laws?

Our regulations allow for waste generators to determine whether their waste is hazardous either by testing the waste or by applying their knowledge of the waste’ composition. Should a generator opt to test the waste to determine whether it exhibits the Toxicity Characteristic, the proper test is the TCLP, EPA Method 1311. Many environmental testing laboratories can perform this test.

6) What are the proper ways of disposing of spent antifreeze which contains high levels of lead?

Spent antifreeze that exhibit's the Toxicity Characteristic for lead must be disposed of as a hazardous waste under the RCRA Subtitle C (hazardous waste) program, and may be subject to land disposal restrictions, requiring the waste to be treated prior to disposal. There are, however, certain exclusions in the RCRA hazardous waste regulations that may be relevant. First, household wastes (including household waste that has been collected, transported, stored, treated, disposed, recovered, or reused) are excluded from being hazardous wastes. Also, “conditionally exempt small quantity generators” (generators of less than 100 kg of hazardous waste per month) are exempt from hazardous waste regulations, provided that they meet certain conditions--primarily limits on accumulation. This exclusion is described at 40 CFR §261.5.

Additionally, state and local regulations may apply. For details o disposal requirements, contact the appropriate EPA Regional office (Region 9 for California), as well as state, and local regulatory agencies.

Should you have any further questions regarding spent antifreeze, please feel free to contact Dave Topping of our Waste Identification Branch at (202) 382-7737.

Sincerely,

David Bussard
Director
Characterization and Assessment Division

Enclosure

HI-TECH INDUSTRIES, INC.

NOVEMBER 30, 1990

DAVID BUSSARD...DIRECTOR OF CHARACTERIZATION AND ASSESSMENT DIVISION
OFFICE OF SOLID WASTE.....(OS-330)
401 "M" ST. S.W.
WASHINGTON, D.C. 20460

DEAR E.P.A.

THANK YOU FOR RESPONDING TO OUR LETTER DATED 6-18-90 (ENCLOSED)....YOUR
LETTER DATED 8-24-90 (ALSO ENCLOSED) STATES THAT "EPA HAS ANECDOTAL
INFORMATION THAT SPENT ANTI-FREEZE OFTEN CONTAINS LEAD LEVELS SUFFICIENTLY
HIGH TO CLASSIFY THE WASTE AS E P TOXIC."

OUR FINDINGS AS WELL AS ASTM'S LEAD US TO BELIEVE THAT MOST SPENT ANTI-FREEZE
CONTAINS HIGH LEAD LEVELS....

QUESTION #1! .."HOW MANY PARTS PER MILLION OF LEAD DOES THE E.P.A. CONSIDER
HIGH ENOUGH TO CLASSIFY THE WASTE SPENT ANTI-FREEZE AS E P TOXIC?"

QUESTION #2..."DOES E P TOXIC MEAN THE SAME AS HAZARDOUS WASTE?"

QUESTION #3..."WHICH OTHER ELEMENTS CONSTITUTE E P TOXIC SUBSTANCES IN SPENT
ANTI-FREEZE...IE...COPPER, ZINC??

QUESTION #4..."WHEN YOU SAID SPENT ANTI-FREEZE OFTEN CONTAINS HIGH LEAD
LEVELS...WHAT PERCENTAGE OF THE TIME DID YOU MEAN BY THE WORD OFTEN ?"

QUESTION#5..."HOW WOULD AN INDIVIDUAL ASCERTAIN THE LEAD LEVEL IN HIS SPENT
ANTI-FREEZE TO DETERMINE IF THEY WOULD BE REQUIRED TO COMPLY WITH
HAZARDOUS WASTE DISPOSAL LAWS?"

QUESTION #6..."WHAT ARE THE PROPER WAYS OF DISPOSING OF SPENT ANTI-FREEZE
WHICH CONTAIN HIGH LEVELS OR LEAD?"

THANK YOU IN ADVANCE...

JOHN RANDALL
HIGH TECH INDUSTRIES, INC.